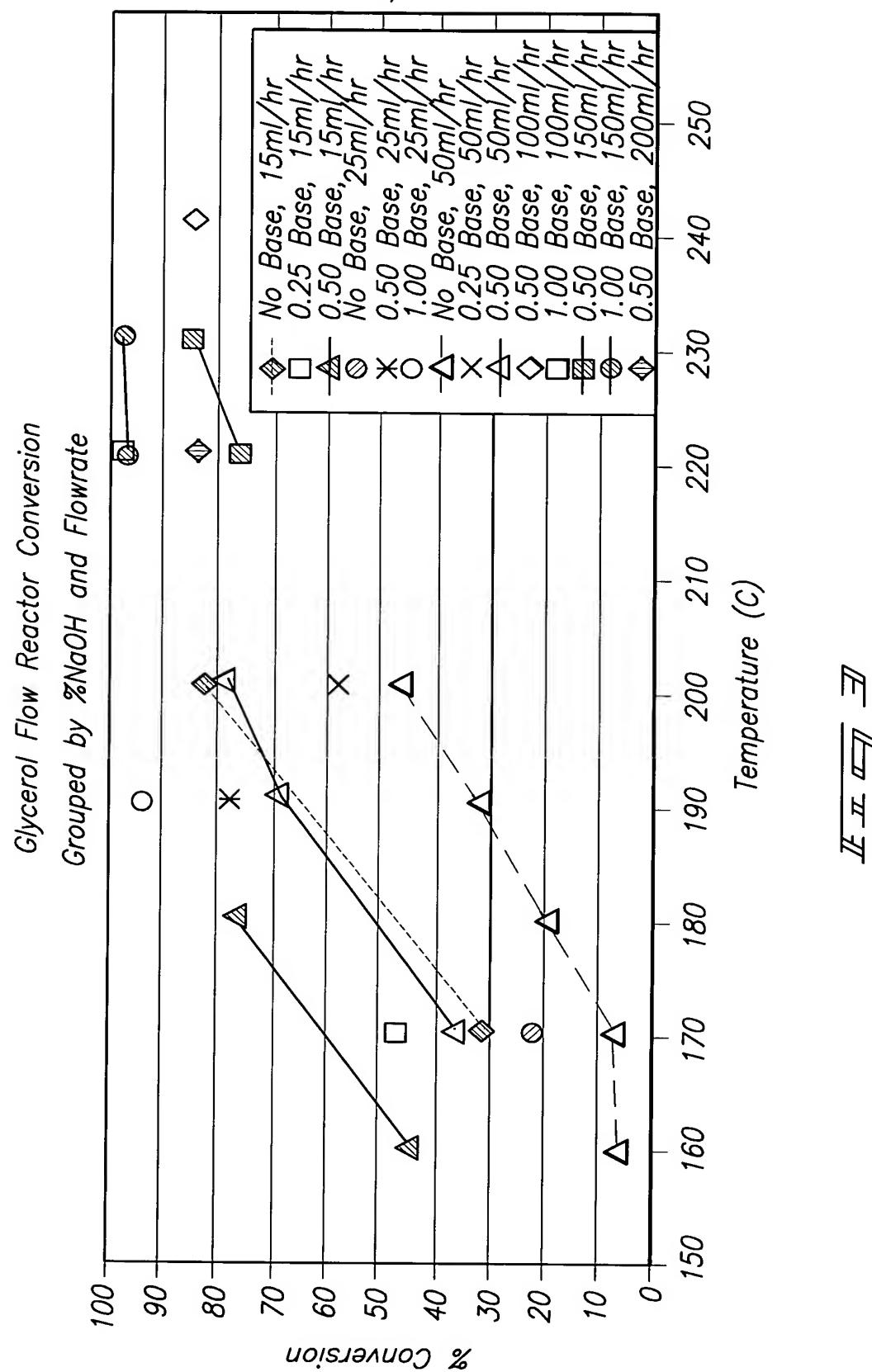
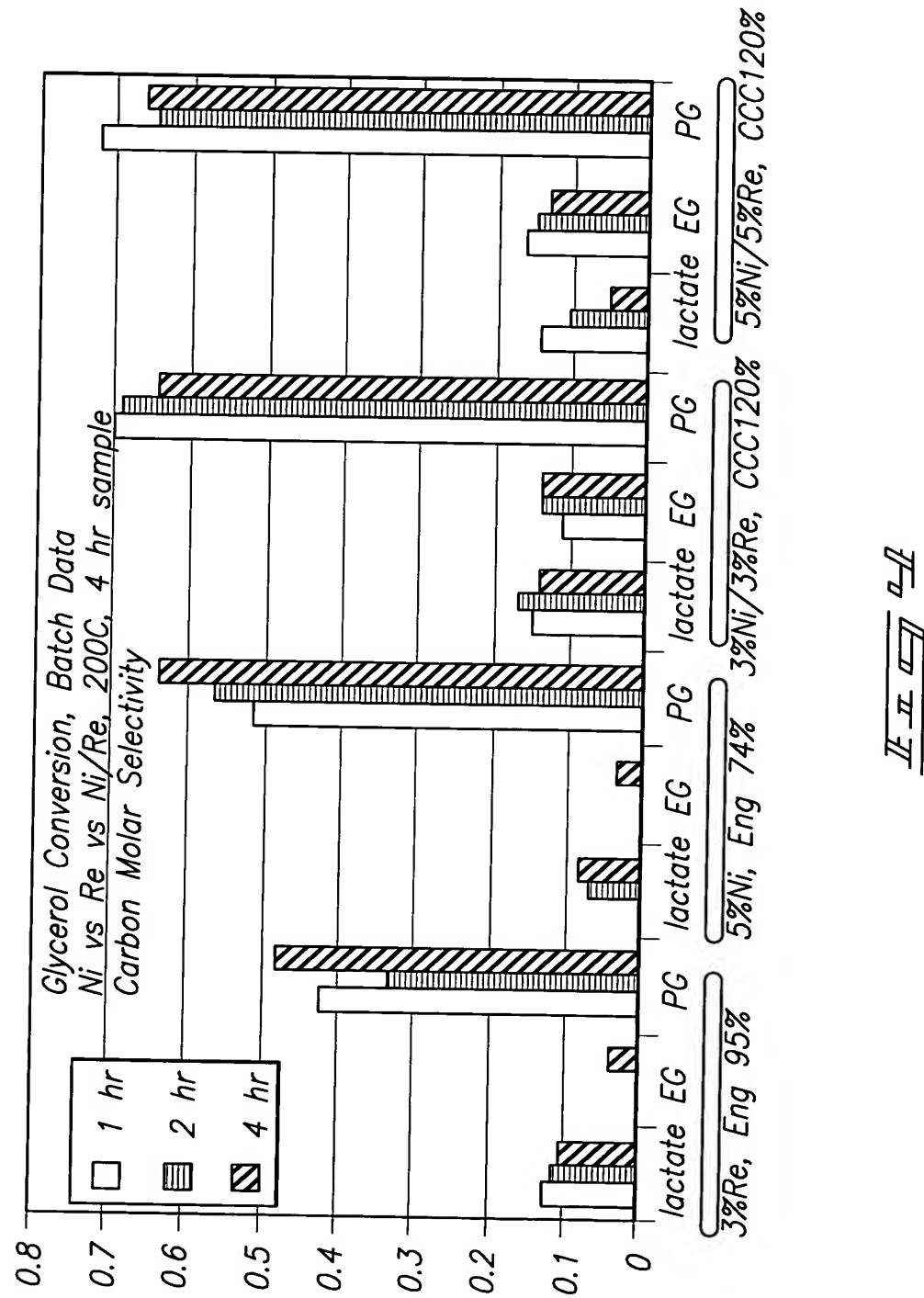
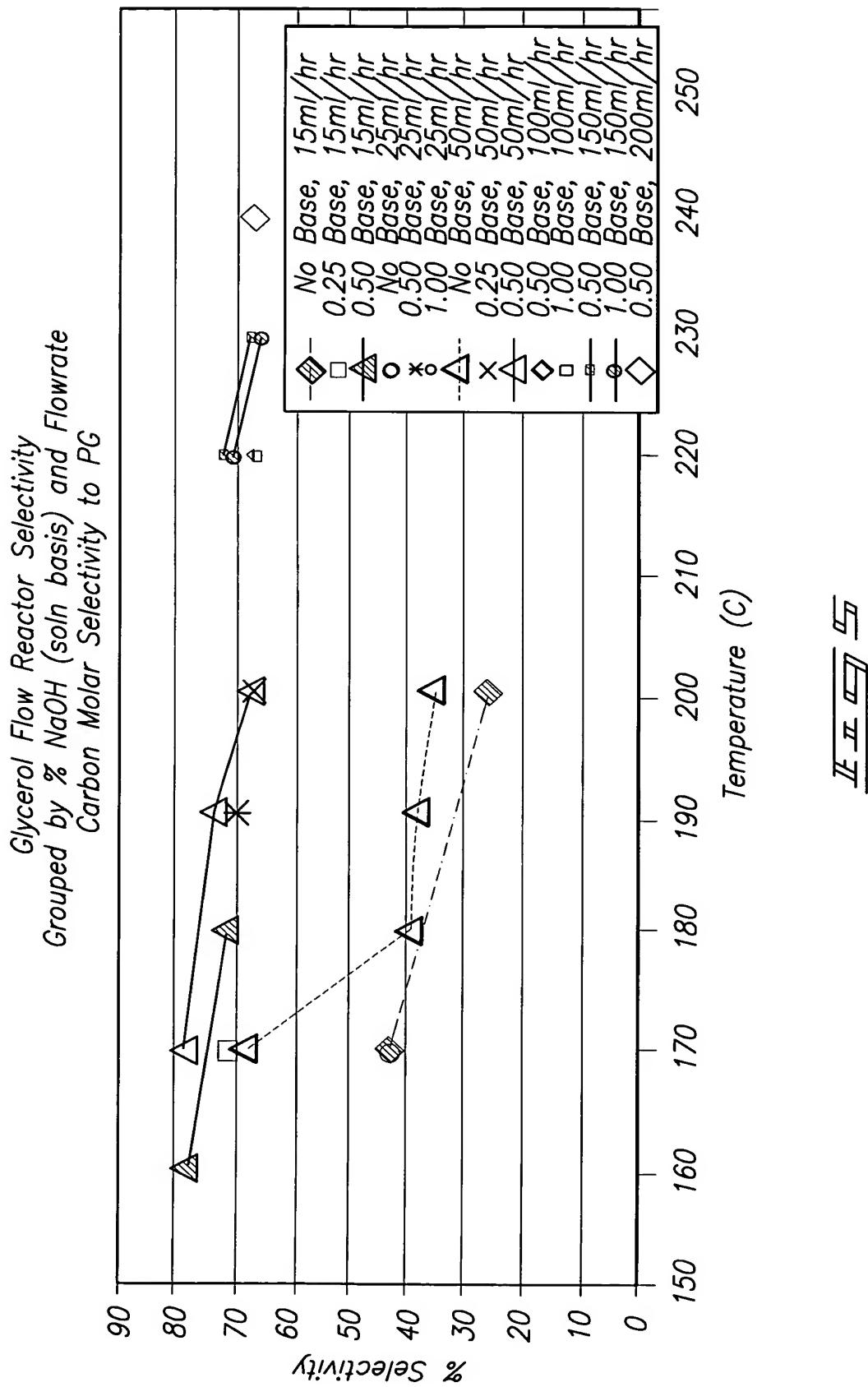
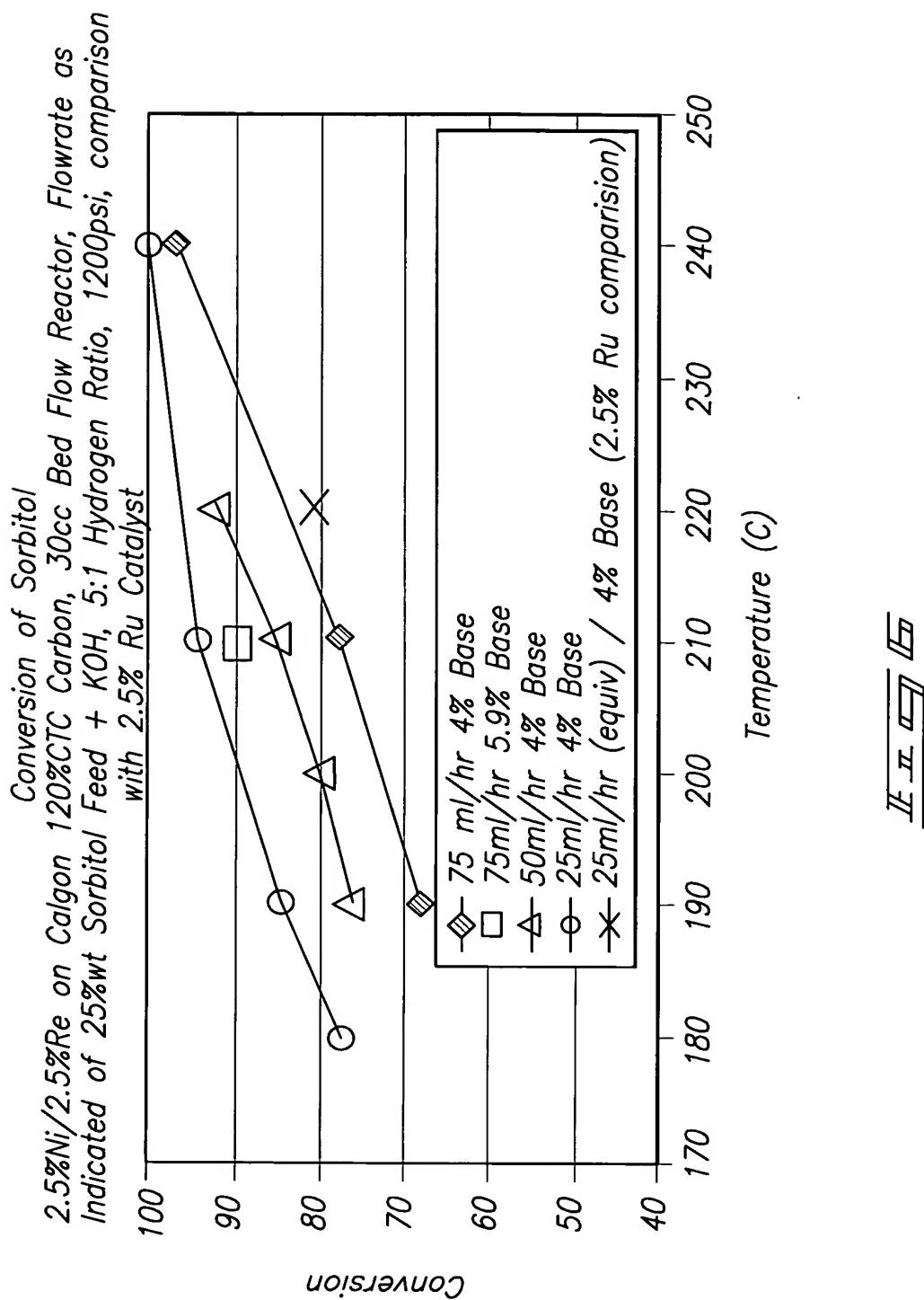


3/12



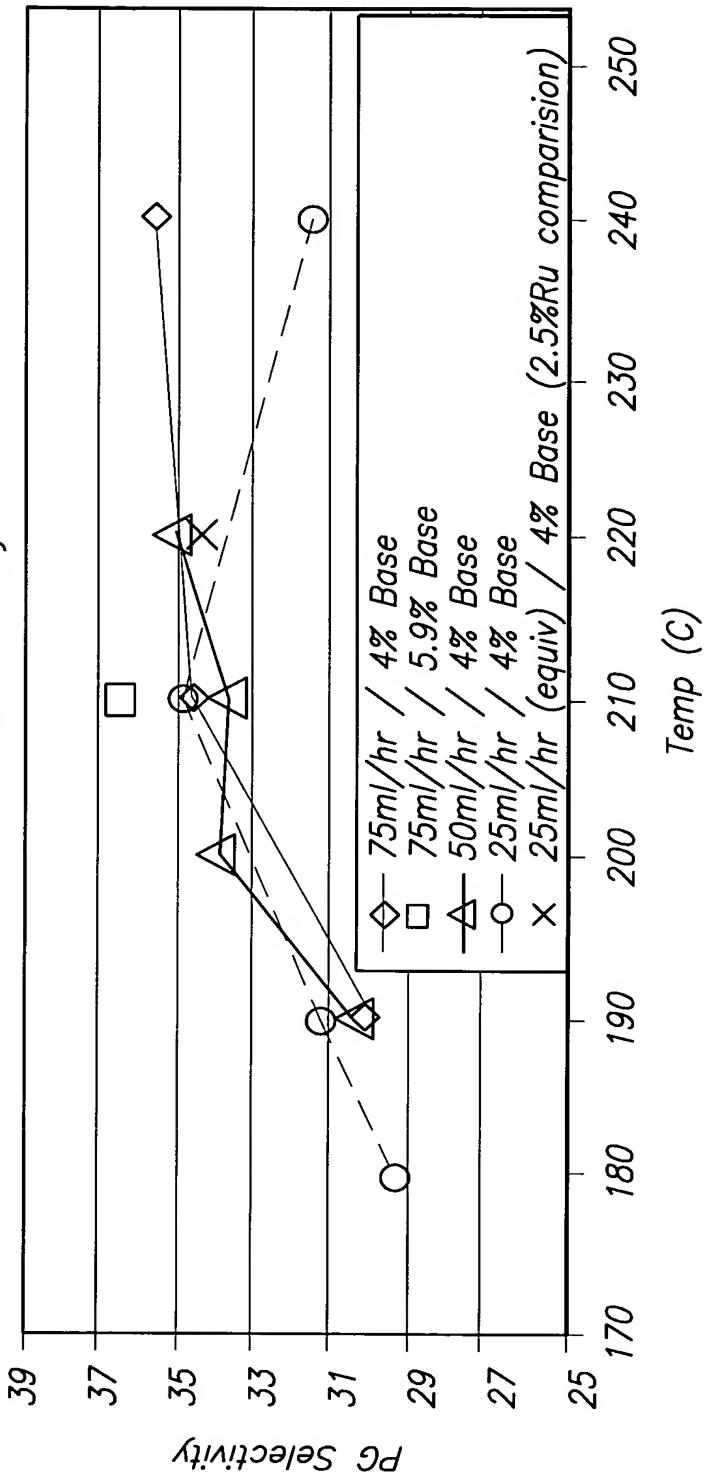




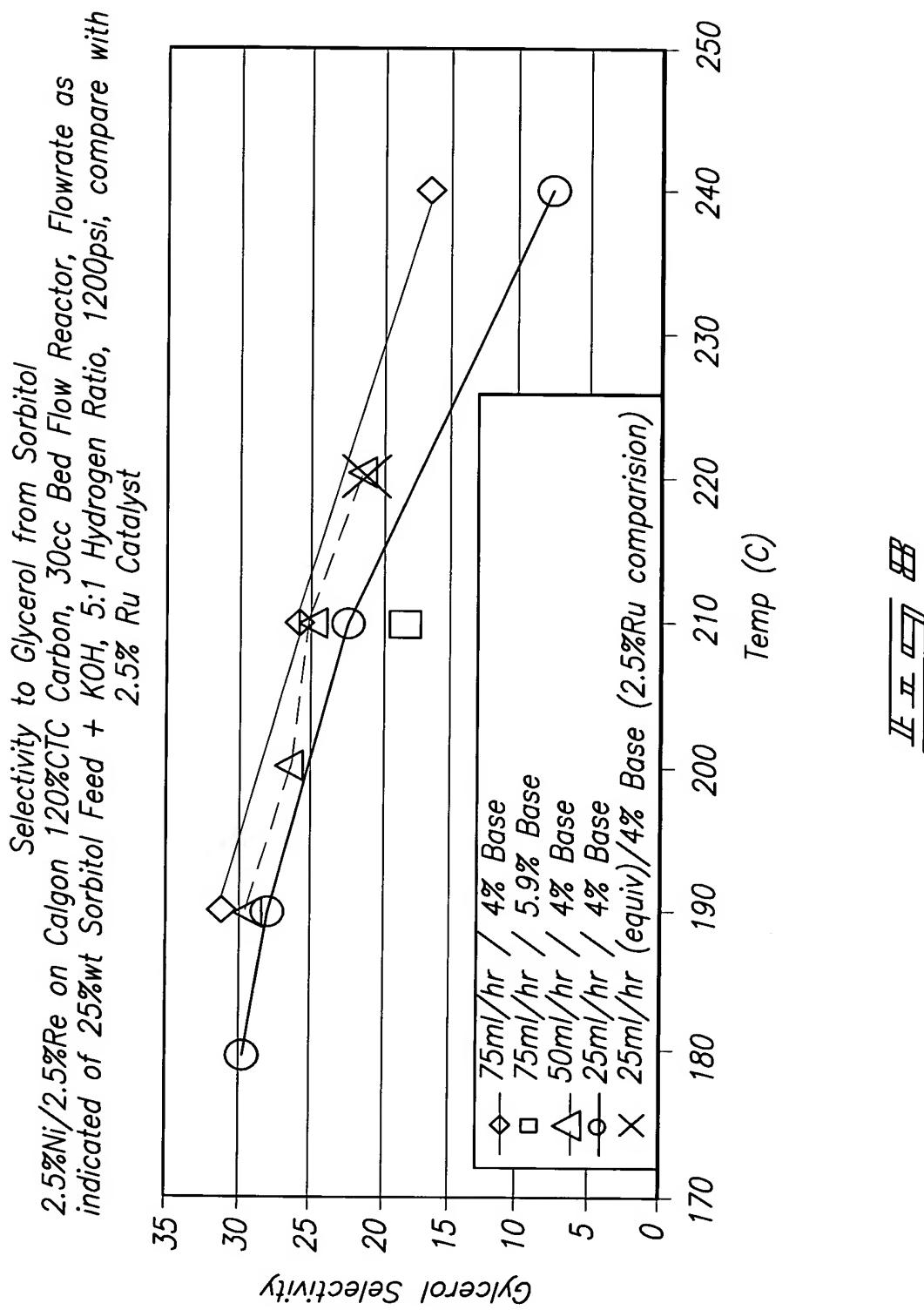


7/12

2.5%Ni/2.5%Re on Calgon 120% CTC Carbon, 30cc Bed Flow Reactor, Flowrates as indicated of 25%wt Sorbitol Feed + KOH, 5:1 Hydrogen Ratio, 120psi, compare with 2.5% Ru Catalyst

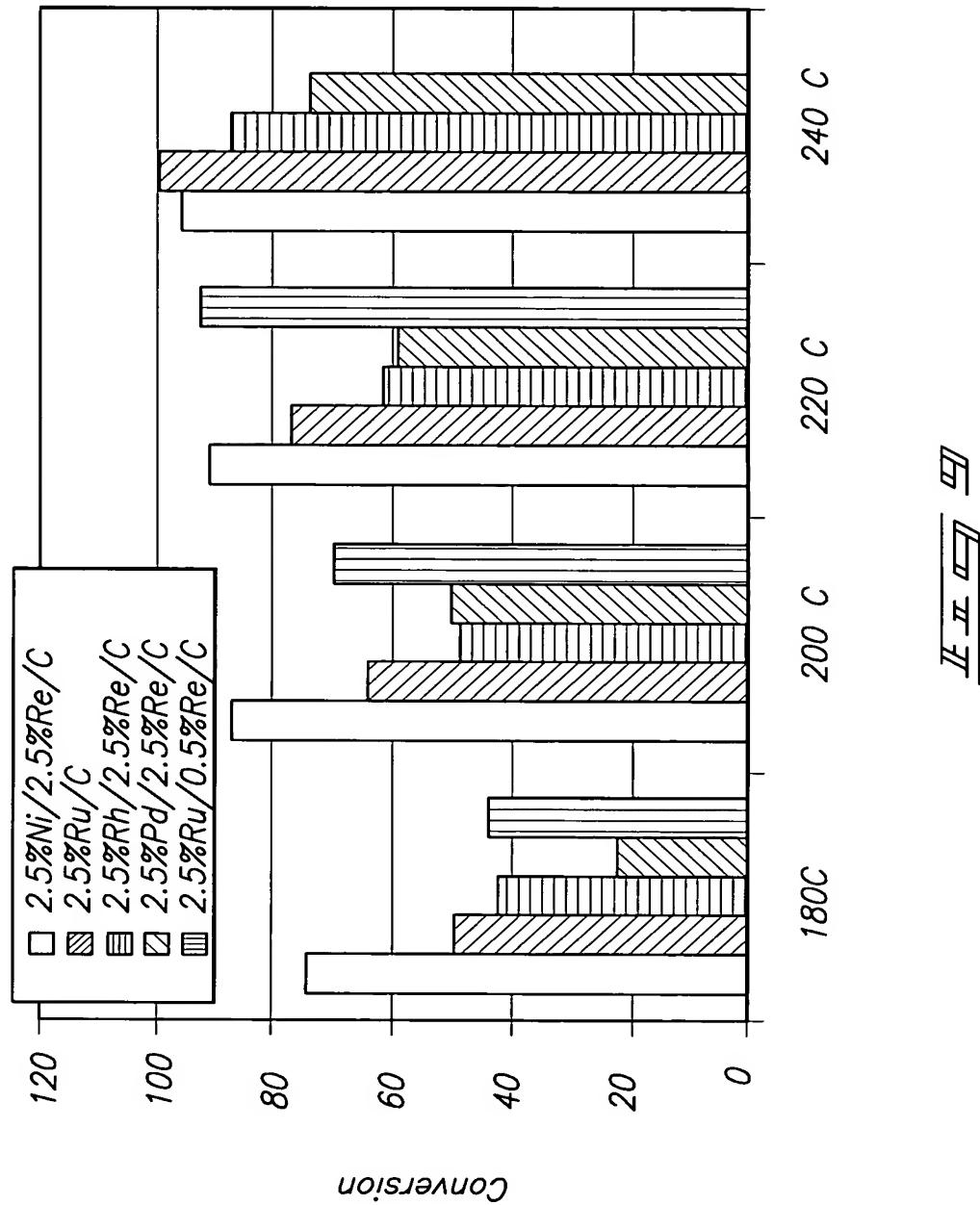


II II II

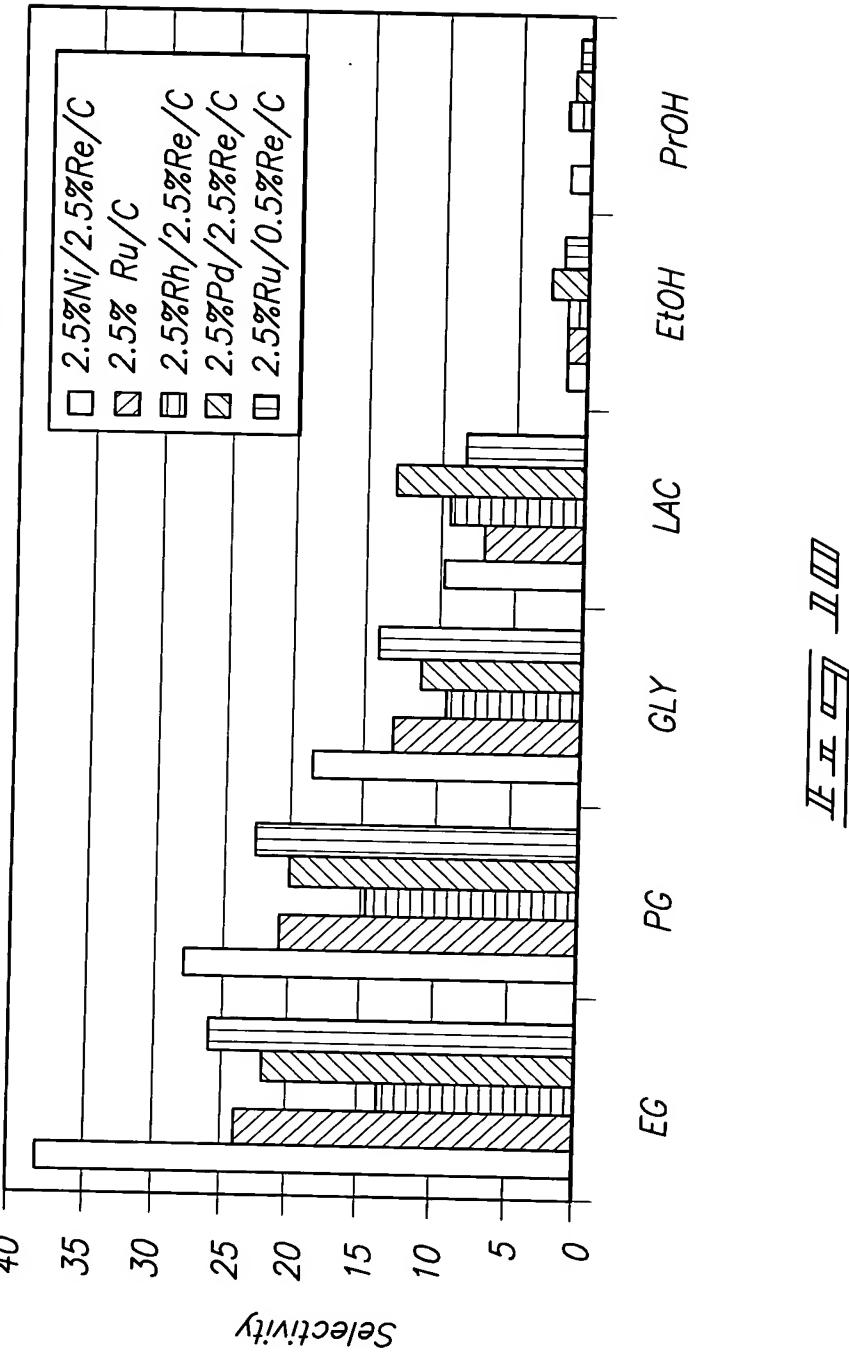


9/12

Comparison of Xylitol Conversion vs. Temperature
300cc Batch Reactor, 120psig H₂, 4-hour sample



Comparison of Product Selectivity by Catalyst at
50% Xylitol Conversion
300cc Batch Reactor, 200C, 1200 psig H₂



EG PG GLY LAC EtOH PrOH

